Vectoring (or Vectored VDSL) is an innovative technology that offers super-fast broadband speeds over copper at a cost many times lower than fiber-to-the-home (FTTH) technologies. However, simply upgrading DSL hardware is not enough to successfully deliver vectoring technology across a network.

ASSIA Expresse Solutions Smart Vectoring offers service providers the expertise and tools required for a successful vectoring deployment that can result in increased revenue, improved operational efficiencies, and an improved customer experience.

ASSIA Expresse Solutions Smart Vectoring

**Smart Vectoring**

**Vectoring**

- High-Quality Performance

**ROI**

- Eliminate Crosstalk

**Lightning Speed**

- VDSL

**Co-existence with Legacy Equipment**

**Network Efficiency**

Smart Vectoring is a highly effective network management system that offers superior functions that deliver useful recommendations, analysis results, and automated processes to teams across an organization, including netops, marketing, contact center, and field operations. When combined with ASSIA expert consulting, the Smart Vectoring solution helps deliver a successful network upgrade and an improved customer experience.

ASSIA consultants structure a typical engagement across four phases that ensure a smooth deployment of vectoring and ongoing continuous improvement.
**Smart Vectoring - Four Phases**

**PHASE 01**
Using sophisticated analysis tools to examine the network for vectoring suitability, our experts perform a pre-deployment operational assessment. This includes a crosstalk estimate for every line in the network to identify which lines can yield the best results with vectoring. The speeds of all lines are determined before and after vectoring, enabling service levels to be defined for each line, thereby predicting a gross revenue estimate for the network. The gross revenue estimate is then used by the service provider to calculate the ROI of the project.

**PHASE 02**
Based on the operational assessment, a deployment plan is designed to determine neighborhood priorities for deployment and lines that need repairing before an upgrade, thus allowing the service provider to allocate budget and prioritize resources. This information helps in critical decision making, enabling the service provider to develop a plan regarding management of non-compliant consumer premises equipment (CPE’s), especially in large brown-field deployments. With Smart Vectoring, service providers can upgrade CPEs in a phased rollout, rather than replacing them all with vectoring compliant equipment straight away. This is because DSL Expresse allows for coexistence of legacy lines and vectored CPE’s.

**PHASE 03**
Once DSL Expresse Smart Vectoring management software is installed on the network, the service provider can continuously diagnose and optimize the network, managing legacy lines and vectored lines in same binder, and using these tools to optimize performance of each vectored line while inhibiting other interferences (i.e. impulse noise and radio interferences) from affecting performance on other lines.

**PHASE 04**
ASSIA’s consultants continually work with service providers to improve and enhance the algorithms that determine the appropriate analytical information and guidance that DSL Expresse provides for Smart Vectoring. This ongoing phase of the engagement focuses on four main areas:

- Continuous Improvement
- Metrics and Regular Reporting
- Program Management
- Software Maintenance & Support

**System Requirements**
DSL Expresse v. 3.3 or higher and the following software functional modules: Vectoring, Vectoring Predictor, and Vectoring Management.

The Service Recommendation module is a prerequisite of the Vectoring Predictor module. Also, inclusion of the G.inp management module is recommended.

**About Expresse Solutions**
Contact your ASSIA account executive who can develop a detailed Smart Vectoring proposal.

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